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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,554	08/16/2006	Erkki Aho	1503-0191PUS1	8535

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EXAMINER
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HUG, ERIC J

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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12/09/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,554	<b>Applicant(s)</b> AHO, ERKKI	
	<b>Examiner</b> Eric Hug	<b>Art Unit</b> 1791	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/14/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

The specification is objected to because of the following:

The specification contains several reference characters which have been used to designate more than one feature, or to designate a single feature described in at least two different terminologies. At least the following have been identified (presented in order of appearance):

- Reference character "70" is used to designate a press shoe and a press beam.
- Reference character "K" is used to designate a loading element and a loading unit.
- Reference character "22" is used to designate a means, a flow path, and threaded holes.
- Reference character "2" is used to designate an outer surface and a lateral surface.
- Reference characters "40" and "41" are each used to designate manifolds and distribution channels.

Applicant is respectfully requested to check the specification for any other inconsistencies in labeling of features, and correct as necessary. Applicant is also requested to check the drawings for consistency between disclosed features and the features labeled in the drawings.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The claimed means (22) for reducing lateral forces between the loading element and the shoe press supporting beam must be shown or the feature canceled from the claims. No new matter should be entered.

The specification, page 7, lines 23-27, recites:

"The loading unit K further comprises at least one flow path 22 from the chamber space S between the first cylinder part 6, 71 and the first piston part 1, 114 to the space between the loading unit K and the supporting surface, such as the supporting beam 12. This can be utilized to reduce the lateral forces."

Currently, feature (22) is shown only in Figure 1 as a threaded hole in the piston part (1) of the loading element (K), on the side adjacent the supporting beam (12).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 1-12 are objected to because of the following:

The claims contain reference characters which have been used to designate more than one feature as detailed below:

-- In claim 1, reference character (70) is used to designate a press shoe, whereas in claims 2 and 3 it is used to designate a press beam (emphasis added).

-- In claim 1, reference character (K) is used to designate a loading element, whereas in claims 2, 3, 4, 9, and 10 it is used to designate a loading unit.

-- In claim 6, reference character (100) is used to designate a piston part, whereas in claims 7 and 8 it is used to designate a piston rod. It is noted also that reference character (105) has been used to designate the piston rod in claim 6.

Furthermore, claim 1 recites "..., said unit comprising a first cylinder part and a first piston part disposed in the cylinder part (6,71), a first piston part (1, 114) arranged in the cylinder part, ..." (emphasis added). The underlined feature appears redundant to the previous feature.

All other claims are objected to as being dependent on claim 1.

Appropriate correction is required.

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***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the claim recites the limitation "the shoe press supporting beam".

There is insufficient antecedent basis for this limitation in the claim.

Further regarding claim 1, the phrase "or equivalent" (after "supporting beam") renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "or equivalent"), thereby rendering the scope of all the claims unascertainable. See MPEP § 2173.05(d).

Regarding claims 2 and 3, the claims recite the limitations "the side of the press beam (70)" and "the side of the supporting beam (12)" (emphasis added). There is insufficient antecedent basis for these limitations in the claim. It is also unclear which sides of the press beam and supporting beam Applicant is referring to.

Regarding claims 2, 3, 4, 9, and 10, the claims recite "loading unit (K)" (emphasis added). It is unclear if this is the claimed loading unit or if it is the loading element (K) which is a feature of the claimed loading unit as recited in claim 1.

Regarding claim 3, the claim recites the limitation "the transfer means". There is insufficient antecedent basis for this limitation in the claim. It appears that claim 3 should depend on claim 2 rather than on claim 1.

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Regarding claim 5, the claim recites the limitation "the second cylinder-piston unit". There is insufficient antecedent basis for this limitation in the claim. It appears that claim 5 should depend on claim 4 rather than claim 1. Claims 6-8 also recite the same feature and appear that they should depend on claim 4 or a claim other than claim 1.

Further regarding claim 6, the claim recites the limitation "the second piston part". There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 8, the claim recites the limitation of "a joint", and the claim also recites that the joint "preferably comprises a spherical surface part" which is a narrower statement of the limitation. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c).

Regarding claim 9, the claim recites the limitation "the supporting surface". There is insufficient antecedent basis for this limitation in the claim. Further regarding claim 9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitation following the phrase (i.e., the supporting beam) is part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 11 and 12, the claims recite the limitations "the second cylinder space" and "the second piston". There is insufficient antecedent basis for these limitations in the claims. It appears these claims should depend on a claim other than claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Saarinen (US 4,713,147).

Saarinen discloses an extended nip press with a loading shoe pressed against a rotating press roll. The loading shoe 3 is supported on a support frame via an intermediate support means

4. In Figures 3 and 4, the support means 4 is in the form of a piston and cylinder arrangement defining a pressure chamber 8 containing a pressurized fluid 9. The bottom of the pressure chamber of the support means 4 is displaceable in the direction of arrow C, i.e., in the longitudinal (MD) direction, via set screw 14 and drive shaft 15. The bottom of the pressure chamber of the support means 4 is also in contact with frame beam 5. The shoe, which is effectively the upper piston part of the support means 4, is connected via rods 16 to the support frame. These rods stabilize the shoe for keeping its place in the direction of movement of the web. See column 3, lines 27-58. Thus, with respect to the claim, Saarinen discloses a loading unit comprising a cylinder part and a piston part provided with means (set screw 14 and drive shaft 15) for moving the press shoe in the longitudinal direction and also provided with means



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(rods 16) for reducing lateral forces between the loading unit and the supporting beam (frame beam 5).

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Brendel et al (US 6,899,023).

Brendel discloses an extended nip press formed by a press shoe loaded against a rotating press roll. The press shoe 10 is supported on a piston and cylinder arrangement 12 which itself is supported on a stationary support 6. The press shoe is arranged to be displaced laterally and tilted on the support as shown in Figure 1. The piston parts of the arrangement 12 are guided within the cylinder part in an articulating manner to permit the tilting. See column 3, lines 55-65. The support 6 can also be tilted as shown in Figure 2. This permits proper alignment of the press shoe with the mating roll, therein alleviating stress on the press components. Thus, with respect to the claim, Brendel discloses a loading unit comprising a cylinder part and a piston part provided with means for moving the press shoe in the longitudinal direction and also provided with means (a tiltable support 6) for reducing lateral forces between the loading unit and the supporting beam (support 6).

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Gustavsson et al (US 7,172,679).

Gustavsson discloses an extended nip press formed by a press shoe loaded against a rotating backing roll. The press shoe 101 is supported on a piston and cylinder loading

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arrangement 106 which itself is supported on a stationary support 105 (Figures 1A, 1B). The press shoe and loading arrangement are arranged to be displaced in the machine direction (col. 5, lines 41-46). The press shoe can also be tilted relative to the support (col. 2, lines 31-57). A stop member 107 is arranged downstream of the press shoe to restrict the motion of the press shoe in the machine direction (col. 3, lines 47-53). The stop member is mounted on the support 105. It is deemed that because the stop member prevents undesirable movement of the press shoe which causes problems, it also reduces lateral stresses between the loading arrangement and support as claimed.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Palmgren (US 6,093,283).

Palmgren discloses an extended nip press formed by a press shoe loaded against a rotating counter roll. In Figure 1, the press shoe 2 is supported on a piston 3 and cylinder 4 loading arrangement which itself is supported on a stationary support 9. The piston 3 is tiltable within the cylinder 4 (col. 3, line 15). Piston 3 is connected to the press shoe 2, and cylinder 4 rests movably on the support 9 (col. 3, lines 17-28). A shallow pressure chamber 15 for hydraulic fluid is provided between the cylinder 4 and support 9. See particularly column 3, line 38 to column 4, line 8. This urges the cylinder away from the surface of the support. This also isolates the piston and cylinder assembly from lateral forces exerted during operation (col. 2, lines 33-38) and counteracts forces in the pressure chamber 5 provided by the piston and cylinder. Thus, with respect to the claim, Palmgren discloses a loading unit comprising a cylinder part and a piston part provided with means (free mount on the support) for moving the

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loading unit in the longitudinal direction and also provided with means (pressure chamber 15 between loading unit and support) for reducing lateral forces between the loading unit and the support.

The language of the remaining claims renders the claimed features incomprehensible so as to preclude a reasonable search of the prior art by the examiner. Applicant is requested to submit an amendment which clarifies the claims so that the examiner may make a proper comparison of the claimed invention with the prior art. Applicant should be careful not to introduce any new matter into the disclosure.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jorma (US 2001/0013400) discloses a shoe press having a loading unit comprising two loading cylinders, one on the shoe and one on the supporting frame, and a connecting device engaging both cylinders. The loading unit is movable in the longitudinal direction.

Snellman (US 6,387,219) discloses a shoe press having a loading unit similar to Jorma above.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is (571) 272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric Hug/  
Primary Examiner, Art Unit 1791